

The Development of the Cotton  
Industry in the United States  
up to 1840

by George W. Kleihege

*1911*

Submitted to the Department of Sociology of the  
University of Kansas in partial fulfillment of the  
requirements for the Degree of Master of Arts.

Master Thesis.

Kleihege, George W. 1911

(Sociology)

The development of the  
cotton industry in the  
United States up to 1840.



THE DEVELOPMENT OF THE COTTON INDUSTRY  
IN THE UNITED STATES UP TO  
1840

By  
George W. Kleihege

Submitted to the Department of Sociology in  
partial fulfillment of the requirements for the Degree  
of Master of Arts.

University of Kansas.

May, 1911.

G.W.Kleihege.

THE DEVELOPMENT OF THE COTTON INDUSTRY  
IN THE UNITED STATES UP TO 1840.

The United States was the last to enter the list of the cotton producing countries, but has been the foremost of them all now for nearly a hundred years.

It is doubtful whether cotton is indigenous to any part of this country, and there seem to be no authentic records of the precise time of its introduction. Cotton seed was brought in from all parts of the globe, and the American plant is the result of innumerable crossings.

The culture of cotton in the United States began about a hundred and seventy-five years before the industry became at all important. The first attempt to raise cotton on the territory of the United States was probably made at Jamestown at the time of the arrival of the colonists.<sup>1</sup> In a pamphlet entitled *Nova Britannica; Offering Most Excellent Fruits of Planting in Virginia*, published in London in 1609, it is stated that cotton grew as well in that province as in Italy. In another pamphlet called "A Declaration of the State of Virginia", published in London in 1630, the author mentions cotton, wool, and sugar cane among the "naturall commodities dispersed up and downe the divers parts of the world \* \* \* all of which may be had in abundance in Virginia."

<sup>1</sup> Description of the New Discovered Country, British State Papers, Colonial, Vol.I,15,1; Economic History of Virginia in the Seventeenth Century, Bruce, Vol.I,p.194.



Bancroft writing of that period says:

"The first culture of cotton in the United States deserves commemoration, In this year (1621) the seeds were planted as an experiment and their "plentiful coming up" was at that day a subject of interest in America and England."

Seabrook<sup>2</sup> states that the green-seed variety was certainly grown in Virginia to a limited extent at least one hundred and thirty years before the Revolution. Some of the early governors of that colony were especially energetic in their efforts to encourage its cultivation. Among these were Sir William Berkeley<sup>1</sup>, Francis Morrison, his deputy, and Sir Edmund Andros. Berkley<sup>3</sup> says the latter gave particular marks of his of his favor toward the propagation of cotton, which since his time has been much neglected.

While there was no cotton exported during the first thirty years of the existence of the Virginia colony, it was cultivated and manufactured during the latter half of the seventeenth century among the planters for domestic consumption. Burk<sup>4</sup> states that "after the restoration (1660) their attention was strongly attracted to home manufactures as well by the necessity of their position as by the encouragement of the assembly and the bounty offered by the King

---

<sup>1</sup>History of the United States, Vol.I, p.179

<sup>2</sup>Origin, Cultivation and Uses of Cotton

<sup>3</sup>Beverly's History of Virginia, p.90.

<sup>4</sup>History of Virginia, Appendix to Vol.II.

But the zeal displayed at the outset of these products gradually cooled, and if we except the manufacture of coarse cloth and unpainted cotton, \* \* \* nothing remained of the sounding list prepared with so much labor by the King and recommended by the legislature, premium, and royal bounty."

One of the earliest historical references to cotton in this country is given in "A brief description of the Province of Carolina, on the Coast of Florida and particularly of a new plantation begun by the English at Cape Feare, on the river now by them called Georges River," published in London in 1666. It states that, "In the midst of this fertile province, in the latitude of 34°, there is a colony of English seated, who landed there the 29th of May, A.D. 1664."

"\* \* \* They have brought with them ~~the~~ most sorts of seeds and roots of the Barbados which thrive in this most temperate climate<sup>of the</sup>. \* \* \* They have indigo, very good tobacco, and ~~a~~ cotton wool." Robert Horne mentions cotton among the products of South Carolina in 1666. Samuel Wilson, in his account of the province of Carolina in America, addressed to the Earl of Craven and published in London in 1682 he states that "cotton of the Cyprus and Smyrna sort grew well, and good plenty of the seed is sent thither". Among the instructions given the proprietors of South Carolina to Mr. West, the first governor, is the following: "You are then to furnish yourself with cotton seed, indigo, and ginger roots." He was also to receive the products of the country in payments of rents at certain

fixed valuations, among which cotton was priced at 3½d. per pound.

In a memoir addressed to Count Pontchartrain, in 1697, on the importance of establishing a colony in Louisiana, the author<sup>1</sup> says: "We might try the experiment of cultivating long-staple cotton." The inference being of course that the short-staple variety was already being grown.

In the very beginning of the eighteenth century cotton culture had reached the extent of furnishing probably one-fifth of the people in North Carolina with their clothing. Lawson<sup>2</sup> speaking of the prosperity of the country and commending the industry of the women, says: "We have not only provisions plentiful, but clothes of our own manufacture, which are made and daily increase, cotton wool, and flax being of our own growth, and the women are to be highly commended for thier in spinning and ordering their housewifery to so great an advantage as they do."

It appears that after this time cotton became widely distributed, and patches of it were common in Carolina. In fact it was one of the principal commodities of Carolina as early as 1708, but its culture was only for domestic uses and, according to the same authority was spun by the women.<sup>3</sup>

---

<sup>1</sup> French's Historical Collection of Louisiana and Florida.

<sup>2</sup> History of North Carolina, p.142.

<sup>3</sup> Oldmixon, The British Empire in America, 1708, p.376.

Chalrevoix<sup>1</sup> in 1722, while on his voyage down the Mississippi, saw, "very fine cotton on the tree" growing in the garden of Sieur le Noir; and Captain Roman<sup>2</sup>, of the British army, saw in East Mississippi black seeded cotton growing on the farm of Mr. Kerbs, and also a machine invented by Mr. Kerbs for the separation of the seed from the lint. The machine was a roller gin, and was probably the first ever operated in this country.

Pickett<sup>3</sup> says that in 1728 the colony of Louisiana, which at that time occupied almost all the southwest territory of the United States, including Louisiana, Mississippi, and Alabama was in a flourishing condition, its fields being cultivated by over two thousand slaves, in cotton, indigo tobacco, and grain.

In 1731 Peter Purry, founder of Purryville, in South Carolina, in his description of the province, says: "Flax and cotton thrive admirably".

In 1734 cotton seed was planted in Georgia that had been sent there by Philip Nutter, of Chelsea, England. Francis Moore<sup>4</sup> who visited Savannah in 1735, in a description of the place says: "At the bottom of the hill, well sheltered from the north wind in the warmest place in the garden, there is a collection of West Indian plants and trees, some coffee, some cocoanuts cotton, etc.

<sup>1</sup> Louisiana Historical Collections, p.159.

<sup>2</sup> Clayborn's Mississippi as a Province, Territory and State, p.143.

<sup>3</sup> History of Alabama, Vol.I, p.274.

<sup>4</sup> Georgia Historical Collection, Vol.I, p.129.

At nearly this same time the settlers on the Savannah river, about 21 miles north of Savannah, are said to have experimented with cotton, the date being fixed by McCall<sup>1</sup> at 1738.

A remarkable feature connected with the early culture of cotton in the American colonies, was its growth so far north, extending up to the thirty-ninth degree of latitude. Tench Coxe, the American economist, of Philadelphia, who is sometimes called the father of the American Cotton Industry because he contributed so greatly to the success of the culture and Manufacture of cotton in the United States, says:

"It is a fact well authenticated to the writer that the cultivation of cotton on the garden scale, though not at all as a planter's crop, was intimately known and thoroughly practiced in the vicinity of Easton, in the county of Talbot, on the Eastern shore of the Chesapeake Bay, Maryland as early as 1736."

According to this same authority the cultivation of cotton was so thoroughly understood in this part of the country that the necessities of the Revolutionary war caused it to be raised in the counties of Cape May, New Jersey, and Sussex, Delaware, and it continued to be grown still later, though only in small quantities for family use. At the time of the Revolution the home-grown cotton was sufficiently abundant in Pennsylvania to supply the domestic needs of that state. Cotton was also cultivated as late as 1826, in Charles, St. Marys, and Dorchester counties, Maryland.

<sup>1</sup> History of Georgia, Vol II, p. 129

<sup>2</sup> Meyer's Register, 1826.

As early as 1742 the culture and improvement of cotton had received considerable attention from the planters of South Carolina and Georgia. In 1739 Samuel Auspuerguer<sup>1</sup> attested under oath that the "climate and soil of Georgia are very fit for raising cotton."

In a tract published in 1740, entitled "A state of the Province of Georgia, attested under oath in the court of Savannah", it is stated that cotton in "large quantities had been <sup>raised</sup> and it was much planted; but the cotton which in some parts is perennial, dies here in the winter; nevertheless the annual is not inferior to it in goodness, but requires more trouble in cleansing from the seed."<sup>2</sup> In the same tract it was proposed "that a bounty be set on every product of the land, viz., corn, peas, potatoes, wine, silk, cotton, etc." "In "A description of Georgia by a gentleman who has resided there upward of seven years and was one of the first settlers, published in London in 1741, the author states that "the annual cotton grows well there, and has been by some industrious people made into clothes."

Samuel Seabrook, in "An important inquiry into the state and utility of Georgia", published in 1741, says: "Among other beneficial articles of trade which can be raised there, cotton, of which some has been brought over as a sample, is mentioned."

<sup>1</sup> Georgia Historical Collection, Vol. II, p. 196.

<sup>2</sup> Patent Office Reports, Vol. VII, 1853, 1854.



In his description of St. Simon Island the same author says:

"The country is well cultivated, several parcels of land not far distant from the camp of General Oglethorpe's regiment having been granted in small lots to the soldiers, many of whom are married. \* \* \* The soldiers raise cotton and their wives spin it and knit it into stockings."

A publication in London in 1762 says: "What cotton and silk both the Carolinas send us is excellent and calls aloud for encouragement to raise both."<sup>1</sup>

Captain Robinson, an Englishman who visited the coast of Florida in 1754, says: "the cotton tree was growing in that country." The Florida country then extended from the Atlantic to the Mississippi River. William Stork in 1765 said: "I am informed ~~that~~ of a gentleman living upon the St. Johns that the lands on that river below the Piccolata are in general good, and that there is growing now good wheat, Indian corn, indigo and cotton."<sup>2</sup>

Cotton early attracted the French colonists in Louisiana. In the year 1752 Michel <sup>3</sup>in a report to the French minister on the condition of the country, gave some details of the cultivation of cotton and the difficulty found in separating the seed from the wool.

<sup>1</sup> Bishop's History of American Manufacture.

<sup>2</sup> Stork's Description of East Florida; London 1765.

<sup>3</sup> De Bow's Review, Vol. I, p. 439.

In 1759 white Siam seed was introduced into Louisiana. DuPrate says: "This East India annual plant has been found to be much better and whiter than what is cultivated in our colonies, which is the Turkey kind."

Letters from Paris to Governor Roman state that there is among the French archives at Paris, Department of Marine and Colonies, a curious and instructive report on cotton in 1760.<sup>1</sup> It was found to be a very profitable crop in Louisiana. In the year 1768 the planters in a memoir to their government, complained that the parent government had turned them over to the Spaniards "just at the time when a new mine had been discovered; when the culture of cotton, improved by experience promised the planters a recompense for his toils, and furnished persons engaged in fitting out vessels with cargoes to load them."

In 1762 Captain Bossu<sup>2</sup>, of the French Marines said: "Cotton of this country", speaking of Louisiana, "is of the species called white cotton of Siam. It is neither so fine nor so long as the silk cotton, but it is, however, very white and very fine."

In 1775 the provincial congress of South Carolina recommended the cultivation of cotton, and in the same year a similar enactment was passed by the Virginia Assembly, which declared that "all persons having proper land ought to cultivate and raise a quantity of hemp, flax, and cotton, not only for the use of their own families, but to spare to others on moderate terms."

I De Bow's Reviews Vol. I, p. 300

America called  
2 Travels Through the Province of North ~~Carolina~~ Louisiana

This legislation no doubt was suggested on account of the changed relations of the colonies with Great Britain, for as early as 1766 Benjamin Franklin ~~stated~~<sup>1</sup> in answer to a question by a member of Parliament, asking if he did not think that cloth from England was absolutely necessary to the Colonists said: "No, by no means absolutely necessary; with industry and good management they can very well supply themselves with all they want. \* \* \* I am of the opinion that before their old clothes are worn out they will have new ones of their own making. They have taken steps to increase the wool. They have entered into a combination to eat no more lamb, and very few lambs were killed last year. This course persisted in will make a prodigious difference in the quantity of wool."

In 1776 Thomas Jefferson,<sup>2</sup> in a letter, says:

"The four southernmost States make a great deal of cotton. Their poor are almost entirely clothed with it in winter and summer. In winter they wear shirts of it and outer clothing of cotton and wool mixed. In summer their shirts are linen but the ~~the~~ outer clothing cotton. The dress of the women is almost entirely of cotton, manufactured by themselves, except the richer classes, and even many of them wear a great deal of homespun cotton. It is as well manufactured as the calicoes of Europe."

1 An Examination of Dr. Franklin.

2 Notes on the State of Virginia.

In this same year, 1786, James Madison, at the convention of Annapolis expressed the conviction from the experience already had" from the garden practice in Talbot County, Maryland, and the circumstances ~~appearing~~ of the same kind abounding in Virginia, there was no reason to doubt that the United States would one day become a great cotton producing country."

This year, <sup>1786</sup> Sea Island cotton was introduced into Georgia, the seed being sent there from the Brahma Island to Governor Tatnall, William Spaulding,<sup>1</sup> Richard Leake, and Alexander Pissett of that State. The cotton adapted itself to the climate and every successive year saw long-staple cotton extending itself along the shores of South Carolina and Georgia.

According to Thomas Spaulding, the first planter who attempted cotton culture on a large scale was Richard Leake, of Savannah, but the editor of Niles Register (1824) says that Nichol Turnbull, a native of Smyrna, was the first planter to cultivate cotton upon a scale for exportation. His residence was Deptford Hall, three miles from Savannah, where he died in 1824.

In a letter, dated Savannah, December 11, 1788, to Col. Thomas Procter, of Philadelphia, Leake says:

"I have ~~just~~ ~~just~~ been this year an adventurer ( and the first who has attempted it on a large scale) in introducing a new staple ~~for~~ the planting interests, the article of cotton,-- a sample of which I beg leave now to send you and request you will lay them before the Philadelphia Society for Encouraging Manufacture, that the quality may be inspected  
1 Thomas Spaulding in Niles Register, 1828.

Several here, as well as in North Carolina, have followed and tried the experiment, and it is likely to answer our most sanguine expectations. I shall raise about 5,000 pounds in the seed from eight acres of land, and next year I expect to plant about fifty or a hundred acres if suitable encouragement is given. The principal difficulty that arises is the cleansing ~~of the~~ it from the seed, which I am told they do with dexterity and ease in Philadelphia with gins or machines for the purpose. \* \* \* I am told they make those that will clean 30 to 40 pounds clean cotton in a day and upon very simple construction."

"The first attempt in South Carolina to produce Sea Island cotton was made in 1788 by Mrs. Kinsey Burden at Burdens Island. As early as 1779 the short staple was produced by her husband, whose negroes were clothed in homespun cotton cloth. Mrs. Burden's efforts failed. The plant did not mature, and this was attributed to the seed, which was of the Bourbon variety. The first successful ~~attempt~~ variety seems to have been grown by William Elliot on Hilton Head, near Beaufort, in 1790, with <sup>5</sup>~~12~~ bushels of seed, which he bought in Charleston and for which he paid 14s. a bushel. He sold his crop for 10<sup>1</sup>/<sub>2</sub>d. a pound."

In 1791 John Scriven, of St. Luke's Parish, planted 30 or 40 acres on St. Marys River. He sold it for from 1s.2d. to 1s.6d. per pound. It is certain that at that period many ~~many~~ planters on the Sea Islands and contiguous

mainland experimented with long-staple cotton and probably it was produced by them for market.

One of the earliest reports of export cotton from the colonies is a bill of lading which certifies that on July 20 1751, Henry Hansen shipped, "in good order and well conditioned , in and upon the good snow called the Mary, whereof is master under God, for this present voyage, Barnaby Badgers, and now riding in the harbor of New York and by God's grace bound for for London-- to say-- eighteen bales of cotton wool, being marked and numbered as in the margin", and are to be delivered in like good order, and conditioned at the aforesaid port of London (and the danger of the sea only excepted), unto Messrs Horke and Champion or their assigns, he or they paying freight for the said goods, three farthings per pound primage and average accustomed."

The feeling regarding the culture and manufacture of cotton in the colonies at this period may be gathered from the following extract from a letter of July 7, 1749 addressed to the Georgia office of London to the Governor of Georgia:

"You say, sir, likewise in your letter, that the people of Vernonburg and Acton are giving visable appearance of revising their industry; that they are propagating large quantities of flax, and cotton, and that they are provided with weavers, who have already wove several large pieces of cloth of a useful sort, whereof they have sold divers, and some they made use of in thei own families. The account of the industry is highly satisfactory to the trustees; but as to ~~the~~ manufacturing the produces they raise, they



must expect no encouragement from the trustees, for ~~the~~ setting up manufactures which may interfere with those in England might occasion complaints here, for which reasons you must, as they will, discountenance them; and it is necessary for you to direct the industry of these people into a way which might be more beneficial to themselves and would prove satisfactory to the trustees and the public; that is, to show them what advantages they will reap from the produce of silk, which they will receive immediate pay for, and that this will not interfere with or prevent their raising flax or cotton, or any other produces for exportation, unmanufactured. \* \* \*."

A pamphlet entitled ~~the~~ A Description of South Carolina states that cotton was imported to Carolina from the West Indies, and says: " It is probable that the early shipments from this country were of this West Indian cotton, although English writers mention it as an import of Carolina Cotton."<sup>1</sup>

Donnell says:

" The first regular exportation of cotton from Charleston was in 1785 when one bag arrived in Liverpool, per ship Diana, to John and Isaac Teasdale & Co. The exportation of cotton from the United States could not have been <sup>much</sup> earlier, for we find in 1784 eight bags shipped to England were seized on the ground of fraudulent importation<sup>2</sup>, as it was not believed that so much cotton could be produced in the United States.

<sup>1</sup> Cassel's Cotton Culture in the Bombay Presidency

<sup>2</sup> The laws of England at that time required imports to be in ships of the country from which the product was exported

The exportation during the next six years was successively 6, 14, 109, 389, 842, and 81 bags."<sup>1</sup>

Dana <sup>2</sup> gives the following data relative to the exportation of cotton from 1739 to 1793:

1739.- Samuel Auspourguer, a Swiss living in Georgia, took over to London, at the time of the controversy about the introduction of slavery, a sample of cotton raised by him in Georgia. This was probably the first export.

1747.- During this year several bags of cotton, valued at 32.11s. 5d. per bag, were exported from Charleston. Some have expressed doubts as to its being American growth, but cotton had been cultivated in South Carolina for many years, and English writers mention it as an import of Carolina Cotton.

1753.- "Some cotton" is mentioned among the exports of Carolina  
1757.- in the year 1753, and of Charleston in 1757.

1764.- Eight bags (8) of cotton imported into Liverpool from the United States.

1770.- Three (3) bales shipped to Liverpool from New York; Ten (10) bales from Charleston; Four (4) from Virginia and Maryland, and three (3) barrels from North Carolina.

1784.- About fourteen (14) bales shipped to Great Britain, of which eight (8) were seized as improperly entered.

1785.- Five (5) bags were imported at Liverpool.

1786.- Nine hundred pounds imported into Liverpool.

<sup>1</sup> Donnell's History of Cotton, p.9.

<sup>2</sup> Cotton from Seed to Loom, p.24.

- 1787.- Sixteen thousand three hundred and fifty (16,350) pounds imported into Liverpool. About 33 bales.
- 1788.- Fifty eight thousand five hundred (58,500) pounds imported into Liverpool. About 117 bales.
- 1789.- One hundred and twenty seven thousand five hundred (127,500) pounds imported into Liverpool. ABOUT 225 bales.
- 1790.- Fourteen thousand (14,000) imported into Liverpool. (There seems to have been no reason for this decline except that there may have been a crop failure.) 28 b
- 1791.- One hundred and eighty nine thousand five hundred (189,500) pounds imported into Liverpool. About 379 bales.
- 1792.- One hundred and thirty eight thousand three hundred and twenty eight (138,328) pounds imported into Liverpool. About 277 bales.
- 1793.- Four hundred and eighty seven thousand (487,000) pounds. About 1000 bales." ( This was the year that Whitney invented ~~his~~ his cotton gin.)
- 1794.- One million six hundred thousand (1,600,000) pounds. 3,200 bales.
- 1795.- Eight million (8,000,000) pounds, or 14,000 bales.
- 1796.- Ten million (10,000,000) pounds or 20,000 bales.

Watkins<sup>1</sup> gives the following table showing the production and consumption of cotton in the United States from 1791 to 1840:

Year	Crop bales	Consumption bales	Exports bales	Stock close of year. bales	Net wt of bales
1790-1791	8,889	*	889	*	225
1791-1792	13,333	*	635	*	225
1792-1793	22,222	*	2,222	*	225
1793-1794	35,556	*	7,407	*	225
1794-1795	35,556	*	27,822	*	225
1795-1796	44,444	*	27,141	*22	225
1796-1797	48,889	*	16,837	*	225

Year	Crop	Consumption	Exports	Stock	Wt
1797-1798	66,667	*1,000	41,600	*	235
1798-1799	88,889	*	42,366	*	225
1799-1800	155,556	35,556	79,066	*	225
1800-1801	210,526	39,474	91,716	*	228
1801-1802	241,228	□	120,619	*	228
1802-1803	252,101	*	158,454	□	238
1803-1804	240,741	44,117	129,766	*	270
1804-1805	281,128	*	154,101	*	249
1805-1806	347,826	*	155,032	*	230
1806-1807	285,784	*	228,362	*	280
1807-1808	271,739	*	385,516	*	276
1808-1809	366,071	*	227,635	*	224
1809-1810	340,000	64,000	373,045	*	250
1810-1811	269,360	57,239	208,950	*	297
1811-1812	304,878	*	117,428	*	246
1812-1813	304,878	*	77,683	*	246
1813-1814	284,553	*	72,683	*	246
1814-1815	363,636	90,000	301,814	*	275
1815-1816	457,565	*	302,814	*	275
1816-1817	460,993	*	303,721	*	282
1817-1818	448,029	*	331,438	*	279
1818-1819	596,429	*	314,275	*	280
1819-1820	606,061	*	484,319	*	264
1820-1821	647,482	*	449,257	*	288
1821-1822	742,049	*	551,219	*	283
1822-1823	620,805	*	582,964	*	298

Year	Crop	Consumption	Exports	Stock	Wt.
1823-1824	762,411	*	504,857	*	282
1824-1825	891,608	*	616,958	*	286
1825-1826	1,121,667	*	655,562	*	312
1826-1827	957,957,281	249,516	854,000	*	331
1827-1828	720,593	120,593	600,000	40,000	335
1828-1829	870,415	118,853	740,000	30,000	341
1829-1830	976,845	126,512	839,000	35,000	339
1830-1831	1,039,847	182,142	773,000	119,000	341
1831-1832	987,477	173,800	892,000	41,600	360
1832-1833	1,070,438	194,412	867,000	48,200	350
1833-1834	1,205,394	196,413	1,028,000	29,600	363
1834-1835	1,254,328	216,888	1,023,000	41,600	367
1835-1836	1,360,725	236,733	1,116,000	43,300	373
1836-1837	1,423,930	222,540	1,169,000	75,000	379
1837-1838	1,801,497	246,063	1,575,000	40,300	379
1838-1839	1,360,532	276,018	1,074,000	52,250	384
1839-1840	2,177,835	295,193	1,876,000	58,442	383

\* No data.

Watkins in the United States Department of Agriculture,  
Division of Statistics, Miscellaneous Bulletin No.9.

It was with the rise of the cotton industry in England and Whitney's famous invention in this country that cotton culture began its amazing growth. For many years cotton culture was confined principally to the eastern seaboard. A small amount was raised about New Orleans in Louisiana, near Natchez in Mississippi, and near Nashville, Tennessee; but as late as 1802 only 29,000 bales were exported from New Orleans, and this had increased to only 37,000 in 1816. About this latter date cotton planters turned their attention to the southwest, which was a great region well suited to the cultivation of this staple; and here cotton culture was extended into the source of the greatest profits in agriculture which the American people had ever enjoyed.

Before 1767 cotton spinning and weaving required so much labor that goods were very costly and comparatively few were made. At that date James Hargreaves, a poor workingman at Nottingham, England, invented the spinning jenny, which spun from sixteen to thirty threads at a time, the operators working the machine with one hand and controlling the thread with the other. Afterwards this was improved so that from eighty to one hundred threads could be made at the same time by one little girl. Shortly after this Richard Arkwright, a barber and hair dyer of Nottingham invented a machine for spinning by means of rollers, and a carding machine to straighten the cotton fibers so that they could be more easily spun. Shortly after this Richard Crompton combined the principles of these two inventions and made the spinning mule or



mule jenny, which is substantially the machine in general use at the present time.

The first spinning mules had only 20 or 30 spindles each, those now used have a thousand or more operated by one person.

These inventions made it possible to make thread rapidly and cheaply, but the weaving was still a slow and laborious task. The only method of weaving so far discovered was by hand looms, going on thread by thread, and that made it very slow and expensive.

Soon after these inventions for spinning were made, Dr. Edmund Cartwright, an English clergyman, began to study to find some mechanical way to do the work of weaving; and during a visit to Arkwright's cotton mill the idea of a power loom occurred to him. This invention marked a great step in advance in the cotton industry. It has been greatly improved so that many single mills contain hundreds of power looms, run by steam and electricity. They run so rapidly that one mill turns out thousands of yards of cloth in a day, and so cheaply that a yard of cotton cloth costs but a few cents.

These inventions by themselves, however, could not have caused the <sup>production</sup> ~~invention~~ of cotton to increase very materially, for there was still a break to be bridged. The only way to separate the seeds from the fiber was by hand, and it took one person, working hard a whole day to save a pound of lint, and almost two years to gather a standard bale. This cost

so much that it was not profitable to raise cotton. It was Eli Whitney, who, by his invention, inaugurated the new era which was to perfect the industry of cotton ginning, and thus add the last step that was necessary to revolutionize the culture and commerce of the staple. It is reported that a Louisiana French planter, Dubreuil invented a machine for separating the lint from the seed as early as 1742, but there was practically no demand for the machine and it fell out of use. Whitney's machine has all the essential parts of the modern gin, but the primitive gin was operated by hand and had a very limited capacity. The first real advancement was the application of horse power.

The coming of the gin ushered in a marvelous period which made cotton manufacturing the premier industry of the world, and transformed "simple farmers into lordly planters, and humble millers into manufacturing princes".

The first cotton mill erected in the United States was built at Beverly, Massachusetts in 1787-88. Others were soon built in various towns along the eastern border of the country especially Pawtucket and Providence Rhode Island, Boston, Mass., New Haven and Norwich, Conn., New York City, Paterson, N.J. Philadelphia, Pa., and Statesburg, S. C. In them the carding and spinning were done by machinery. The weaving, however, was done by hand until looms until 1815, when a power loom mill was started at Waltham, Mass., but the use of hand looms and spinning wheels for cotton manufacture was common in all parts of the country up to the time of the Revolutionary war,

especially in the southern colonies where they continued to be used by the women in their houses many years after the erection of the cotton factories.

In 1831 there were in the United states 801 cotton mills, with 33,433 looms and 1,246,703 spindles, employing 62,208 persons, and consuming 77,457,316 pounds of raw cotton, with \$40,612,984 capital invested.

In 1840 there were in use 2,206,631 spindles, employing 72,119 hands, and consuming 136,000,000 pounds of raw cotton , with \$51,102,350 capital invested.